

REMARKS

1. *Informalities*

Information Disclosure Statement. The information disclosure statement was rejected for not complying with 37 C.F.R. § 1.97, 1.98, and MPEP § 609 because of document numbers 9199/15 and 15184/33. In response, Applicant is submitting a substitute Information Disclosure Statement to replace the one previously submitted. The substitute Information Disclosure Statement is in proper condition and complies with all of the requirements based on the time of filing the substitute statement with this response, including all certification requirements set forth in 37 C.F.R. § 1.97(e). In addition, pursuant to 37 C.F.R. § 1.97(c), applicant is submitting the proper fee of \$180.00 to accompany the substitute Information Disclosure Statement, as set forth in 37 C.F.R. § 1.117(p).

Regarding the information disclosure submitted herewith, Applicant was unable to locate the foreign references 9199/15 and 15,184/33 originally and erroneously disclosed as U.S. documents in the Information Disclosure Statement previously submitted. Therefore, applicant has removed these references from the Information Disclosure Statement submitted with this response in anticipation of filing a supplemental Information Disclosure when these references are located.

Drawings. The drawings were objected to as failing to comply with 37 C.F.R. § 1.84(p)(4) because several reference characters have been used to designate multiple elements. The drawings were also objected to as failing to comply with 37 C.F.R. § 1.84(p)(5) because they do not include several reference characters mentioned in the description. In response, Applicant is submitting replacement drawings complying with 37 C.F.R. § 1.84.

Specifically, applicant is submitting a replacement Figure 1, wherein the Figure has been amended to include the reference character “105,” corresponding to the liner member.

Applicant is submitting a replacement Figure 2 to amend the “blocking edge,” as described in the specification, to be labeled with reference character “169” rather than reference character “164,” which is shown properly labeling the “outer surface” of the

tubular sleeve 160. As noted above, Applicant has amended the paragraphs in the specification to reflect this change as well.

Regarding the reference character “112” in the drawings, Applicant has amended the paragraph of specification improperly reciting “inflation portion 112,” to properly recite “inflation portion 110.” As such, no amendments to the drawings was necessary for this particular objection.

Specification. The abstract section of the specification has been amended to comply with MPEP § 608.01(b). A replacement Abstract section is enclosed herein on a separate sheet.

The specification was also amended to correct several informalities. Specifically, Applicant has amended the specification to change all occurrences of “inflation portion 112” to “inflation portion 110” to correctly correspond to the drawings.

Applicant has also amended the specification to change all occurrences of “blocking edge 164” to “blocking edge 169” to correctly correspond to the drawings.

Claim Additions. Claim 21 has been added to the application. New claim 21 is properly supported by the specification and contains no new matter.

2. *Claim Rejections -- 35 U.S.C. § 112*

Claims 3, 4, 12, and 18-20 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, regarding claims 3 and 4, the phrase “the curved portions” lacks antecedent basis. In response, applicant has amended claim 3 to provide proper antecedent basis for this limitation.

Regarding claim 12, the phrase “slid over” has been removed and the claim amended to recite the end of the liner is retained between the milk receiving cup and the lower end of the tubular sleeve in an interference fit. In addition, claim 12 was amended to recite the phrase “liner member” and to remove the phrase “inflation member.”

Regarding claims 18-20, occurrences of the phrase “tubular elongate inflation portion” were amended to “tubular elongate inflation liner,” thus providing proper antecedent to this phrase.

Applicant submits that no new matter was introduced into the claims via any of the amendments identified herein, and that all amendments are properly supported in the specification.

3. *Claim Rejections -- 35 U.S.C. § 102*

Claims 1, 7, and 9-13 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 4,651,676 to Kupres (hereinafter referred to as “the ‘676 patent” or “Kupres”).

In response, Applicant submits that Kupres does not anticipate the present invention because Kupres does not disclose a liner member configured in the manner claimed by the present invention. Specifically, the liner member in Kupres is a flexible inflation member 30 having a distal end 34 and a proximal end. The distal end 34 comprises a cuff 35 that has various components that are wedged within a recess 44 formed by the shell protecting the flange 46 which is connected to the shell 12. See Kupres col. 2., ln. 31-47. As such, the flexible inflation member 30 is retained within the shell 12 at its distal end 16, which is opposite the proximal end 18 to which the connector attaches. There is nothing in Kupres that teaches or suggests that the flexible inflation member 30 is retained in tension. Nor is there anything in Kupres that teaches or discloses that the flexible inflation member 30 has a free end that is configured to be invertedly drawn around the lower end of the shell 12 with a portion of the connector 20 capturing the inverted free end between itself and an outer surface of the lower end of the shell with an interference fit. The teat cup of the present invention is assembled and made operable by inserting the free end of the liner member through the sleeve so that the head portion fits over the upper end of the tubular sleeve. The liner member is then placed in tension by invertedly drawing the free end around the outer surface of the lower end portion of the sleeve. Stated differently, the free end of the liner member is pulled downward and folded back around the outer surface of the lower end portion of the sleeve. Once in this position, the milk receiving cup is then slid over the inverted free end to sandwich the inverted free end between the milk receiving cup and the lower end portion of the sleeve with an interference fit. In this arrangement, the tension placed on the liner member draws the head portion against the upper end portion of the sleeve to provide an air-tight seal between the head portion and the tubular sleeve.

On the other hand, the connector 20 in Kupres is shown being coupled directly to the shell 12 without the inflation member 30 being drawn around the lower end of the shell and retained or sandwiched therebetween, as claimed in independent claim 1 of the present invention. Moreover, Kupres does not speak to the attachment or retaining of the proximal end of the flexible inflation member 30. The entire focus of the description of the invention centers around the attachment of the distal end of the inflation member 30 to the distal end 16 of the shell 12. Therefore, it is improper to conclude that Kupres anticipates claim 1 when it cannot be specifically shown that Kupres teaches the limitations in the claims. Indeed, Kupres does not even suggest that a free end of the flexible liner member 30 may be invertedly drawn around the lower portion of the shell 12 and sandwiched between the shell and the connector.

Kupres further does not teach a liner member having a head portion integrally formed with the liner member, wherein the head portion has an upper teat chamber defined by a cylindrical wall having an outer exposed surface, an intermediate wall extending substantially orthogonally inward from the cylindrical wall, and an upper seal wall laterally extending inward from the cylindrical wall and having a central opening defined by the upper seal wall, wherein the cylindrical wall of the head portion includes a cylindrical retaining extension configured to cooperate with and be coupled to the upper end portion of the tubular sleeve, as does claim 1 of the present invention.

Dependent claims 7 and 9-11 place further limitations on what is otherwise argued allowable subject matter. Therefore, Applicant respectfully submits that these claims stand in a condition for allowance.

Regarding claims 1, 12, and 13, applicant submits that Kupres does not teach a liner member invertedly drawn around the lower end portion of a sleeve so that the liner member is contained, in tension, between a milk receiving cup and an outer surface of the lower end portion of the sleeve, as does independent claim 12, as amended. Rather, Kupres simply shows the connection 20 being coupled directly to the shell 12 with the outer surface of the shell 12 mating with or juxtaposed to the inner surface of the connector 20. Moreover, the flexible inflation member 30 is shown being disposed along the bottom of the shell 12 and not invertedly drawn around to be adjacent the outside surface of the shell 12, thus indicating that the flexible inflation member 30 is not

supported in tension. As mentioned, the description of Kupres does not speak to the connection of the proximal end of the flexible inflation member 30 to the shell 12, but the drawing indicates that the flexible inflation member 30 is simply fit within a notch or groove formed on the bottom of the shell 12 so that when the connector 20 is coupled to the shell 12, a shelf formed within the connector 20 pushes and seals against the flexible inflation member 30. As such, it cannot be said that Kupres anticipates independent claims 1, 12, or 13 of the present invention, as amended, as each and every limitation recited therein is not found or disclosed in Kupres.

Claims 18-20 stand rejected under 35 U.S.C. § 102(b) as being anticipated by United States Patent No. 4,269,143 to Erbach (hereinafter referred to as “the ‘143 patent” or “Erbach”). In response, applicant submits that Erbach does anticipate independent claim 18 of the present invention, as amended. Specifically, Erbach does not teach or suggest a liner member having a head portion including an upper teat chamber defined with a cylindrical wall having an outer exposed surface, an intermediate wall extending substantially orthogonally inward from the cylindrical wall and an upper seal wall laterally extending inward from the cylindrical wall having a central opening defined by the upper seal wall, the cylindrical wall of the head portion including a cylindrical retaining extension configured to cooperate with and be coupled to the upper end portion of the tubular sleeve. Rather, Erbach teaches a resilient body member 14 having a upper cap portion 21 with a flared outwardly extending wall portion, which flared wall portion is indicated by reference numeral 22. See Erbach, col. 2, ln. 1-2. As such, Erbach does not teach each and every limitation found in independent claim 18, as amended.

Dependent claims 19-20 place further limitations on what is otherwise argued allowable subject matter. Therefore, Applicant respectfully submits that these claims also stand in a condition for allowance.

Based on the foregoing, Applicant respectfully requests that neither Kupres nor Erbach anticipate any of the claims of the present invention. As such, Applicant respectfully requests that the rejection under 35 U.S.C. § 102 be withdrawn from consideration.

4. *Claim Rejections -- 35 U.S.C. § 103*

Claims 2-5, and 14-17 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Kupres in view of United States Patent Application No. 6,164,243 to Larson (hereinafter referred to as “Larson”). Applicant appreciates the concerns raised by the Examiner, but respectfully submits that in light of the amendment to the claims as set forth above and the arguments presented below, neither Kupres nor Larson, either individually or collectively, render the claims of the present invention obvious.

In response, applicant has amended each of the independent or base claims 1, 12, 13, and 18 of the present invention to recite one or more limitations not taught or suggested in Kupres. Therefore, Applicant respectfully submits that Kupres does not render obvious any of these claims. As Kupres does not render obvious any of independent claims 1, 12, 13, and 18, applicant further submits that Kupres, in view of Larson, does not render obvious any of the claims depending from these base claims.

Based on the foregoing, Applicant submits that the prior art does not render the claims of the present invention obvious, particularly as amended to recite more specific and definite limitations. As such, Applicant respectfully requests that the claims of the application be reconsidered and that the rejection under § 103 be withdrawn.

CONCLUSION

Based on the foregoing, Applicant respectfully submits that the deficiencies in the application have been corrected and that the proposed claims are neither anticipated nor rendered obvious by the prior art references cited by the Examiner. As such, Applicant believes that the claims are now in a condition for allowance, and action to that end is respectfully requested.

If any impediments to the allowance of this application for patent remain after the above amendments and remarks are entered, the Examiner is invited to initiate a telephone conference with the undersigned attorney of record.

DATED this 14th day of June, 2004.

Respectfully submitted,

THORPE, NORTH, & WESTERN, LLP

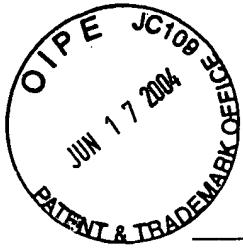


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ABSTRACT OF THE DISCLOSURE

A method and apparatus providing a teat cup assembly. The teat cup assembly includes a tubular sleeve, a milk receiving cup and a liner member. The liner member includes a head portion and a tubular elongate inflation portion. The head portion includes an upper teat chamber defined with a cylindrical wall having an outer exposed surface, an intermediate wall extending substantially orthogonally inward from the cylindrical wall and an upper seal wall laterally extending inward from the cylindrical wall having a central opening defined by the upper seal wall. The cylindrical wall of the head portion includes a cylindrical retaining extension configured to cooperate with and be coupled to an upper end portion of the tubular sleeve. The tubular elongate inflation portion includes side walls with opposite first and second ends defining a liner bore longitudinally along a length of the tubular elongate inflation portion with opposite first and second open ends. The first end is integrally interconnected and extends from the intermediate wall of the head portion with the first open end opening into the upper teat chamber. The second end of the tubular elongate inflation portion is a free end. With this arrangement, the tubular elongate inflation portion is configured to be inserted through a sleeve bore defined in the tubular sleeve so that the cylindrical retaining extension is disposed around an upper end portion of the tubular sleeve. The inflation portion is configured to be placed in tension with the free end of the tubular elongate portion invertedly drawn around a lower end portion of the tubular sleeve with a portion of the milk receiving cup capturing the inverted free end between the lower end portion of the tubular sleeve with an interference fit.

A teat cup system including a tubular sleeve, a milk receiving cup having a portion configured to be operatively coupled to a lower end portion of the tubular sleeve, and a liner member including a head portion and a tubular elongate inflation portion, and wherein the tubular elongate inflation portion is configured to be inserted through the tubular sleeve so that the head portion of the liner is disposed around an upper end portion of the tubular sleeve and the elongate inflation portion disposed within the tubular sleeve, and a bottom end of the tubular elongate inflation portion invertedly drawn around a lower end portion of the tubular sleeve, a portion of the milk receiving cup capturing the inverted free end between the lower end portion with an interference fit.